PA - IOC

QUERY CONTROL FORM				RTIS USE ONLY	
Application No.	10/081,396	Prepared by	Lois Stone	Tracking Number	571514
Examiner-GAU	Lee - 2874	Date	1/9/04	Week Date	12/8/03
		No. of queries	1	IFW	

JACKET			
a. Serial No.	f. Foreign Priority	k. Print Claim(s)	p. PTO-1449
b. Applicant(s)	g. Disclaimer	l. Print Fig.	q. PTOL-85b
c. Continuing Data	h. Microfiche Appendix	m. Searched Column	(r. Abstract)
d. PCT	i. Title	n. PTO-270/328	s. Sheets/Figs
e. Domestic Priority	j. Claims Allowed	o. PTO-892	t. Other

SPECIFICATION

a. Page Missing
b. Text Continuity
c. Holes through Data
d. Other Missing Text
e. Illegible Text
f. Duplicate Text
g. Brief Description
h. Sequence Listing
i. Appendix
j. Amendments
k. Other

CLAIMS

a. Claim(s) Missing
b. Improper Dependency
c. Duplicate Numbers
d. Incorrect Numbering
e. Index Disagrees
f. Punctuation
g. Amendments
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j. Duplicate Text
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MESSAGE

Please provide a copy of the abstract.

Thank you,

initials LS

RESPONSE See Copy attached

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E-5 (Rev. 10/01/02)

ABSTRACT OF THE DISCLOSURE

An optical router integrated in an InP-based substrate bonded to a single thermo-electric cooler for packet-based networks utilizing wavelength-division multiplexing (WDM) on silica fibers. Input and output arrayed waveguide gratings (AWGs) respectively demultiplex and multiplex the WDM signals to and from multiple transmission fibers. Input and output wavelength converters are connected between the input and outputs AWGs and a switching AWG. The output converts may include a tunable laser and interferometer formed in the same substrate. The header information is preferably carried out-of-channel from the WDM data signals, either in the same fiber band or a different one. Photodetectors and laser diodes are formed in the same substrate. Fast RF electronics are formed in GaAs chips and slower electronics formed in a silicon chip are bonded to the InP wafer